

CLAIM AMENDMENTS

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Amend claims: 1-7 and add new claim 8.

1. (Currently Amended) A method of increasing Method to increase the cetane number of a gas oil product based on a petroleum derived gas oil to a target cetane number Y by comprising: adding to the petroleum derived gas oil a volume amount of a Fischer-Tropsch derived gas oil having a higher cetane number, B, than the petroleum derived gas oil of cetane number, A, wherein the volume amount of added Fischer-Tropsch derived gas oil is less than the volume amount which would be added if linear blending is assumed.

2. (Currently Amended) The method of Method according to claim 1, wherein the volume fraction of Fischer-Tropsch gas oil is less than x, wherein x is the volume fraction that would be added if linear blending assumptions would have been made according to the following equation:

$$Y = A + x(B-A),$$

3. (Currently Amended) The method Method according to any one of claims 1 or 2, wherein a volume fraction x is added as Fischer-Tropsch derived gas oil in order to increase the cetane number to target value Y, wherein Y and x are related according to the following equation:

$$Y= A + (B-A)(-px^2 + qx),$$

where p and q are constants such that  $1.4 > q > 1.9$  and  $p = q-1$  and wherein A is the cetane number of the petroleum derived gas oil and B the cetane number of the Fischer-Tropsch derived gas oil.

4. (Currently Amended) The method of Method according to claim 3, in which wherein, x is greater than 0.02 and less than 0.7.

5. (Currently Amended) The method of Method according to claim 4, in which wherein x is less than 0.5.

6. (Currently Amended) The method Method according to any one of claims 1-5, of which wherein the cetane number, A, of the petroleum derived gas oil is greater than 40 and less than 70.

7. (Currently Amended) The method Method according to any one of claims 1-6, of which wherein the cetane number of the petroleum derived gas oil is measured by making use of using near infrared spectroscopy.

8. (New) The method of claim 2, in which a volume fraction x is added as Fischer-Tropsch derived gas oil in order to increase the cetane number to target value Y, wherein Y and x are related according to the following equation:

$$Y = A + (B-A)(-px^2 + qx),$$

where p and q are constants such that  $1.4 > q > 1.9$  and  $p = q-1$  and wherein A is the cetane number of the petroleum derived gas oil and B the cetane number of the Fischer-Tropsch derived gas oil.